


History of Statistics

Fall 2024 Block 2

Instructor

Instructor [Dr. Tyler George](#)

 Cornell College, Abroad/Virtual

 tgeorge@cornellcollege.edu

Class Meetings

September 23rd to October 16th


 See Itinerary

 West 201

 [Course Calendar](#)

Office Hours

 By Appointment

 Abroad/Virtual

Please message me on Whats app or email me if you need to chat. Any time of the day!

Course Overview

You Are A Priority

My goal for this block is to help you learn the material. I want to first and foremost recognize that you are an individual and thus are unique and may learn uniquely. Additionally, your health and well-being are priority one. Learning cannot happen effectively if you don't meet your other personal needs. That all being said, I have structured the class in a way that I, from experience teaching and learning myself, think will be most beneficial for the majority of students. I promise you that I will do my best to create an inclusive and engaging learning environment. I ask that you keep an open line of communication between us for when you may need help and/or flexibility. You and your learning are why I am here.

Course Description

In this course, students will walk the path of historical statisticians in the United Kingdom and the Republic of Ireland, both physically and in thought. Students will learn about, and critique the reasoning of, the founders of statistics, their circumstances, and sometimes flawed reasoning, that led to the creation of major statistical concepts such as correlation and hypothesis testing. Students will additionally learn about, and engage with, cryptography, data visualization, early computers, epidemiology, experimental design, gathering of information, sports statistics, and the role statistics played in the eugenics movement.

Learning Objectives

This course supports the Educational Priorities and Outcomes of Cornell College with an emphasis on knowledge, inquiry, reasoning, communication, intercultural literacy, ethical behavior, and vocation.

Specifically, the learning objectives of this course are:

- (L1) You will develop skills for conscientiously navigating cultures and environments that are different from your own.
- (L2) You will demonstrate a tolerance for ambiguity when facing unexpected or uncomfortable circumstances.
- (L3) You will seek opportunities to engage in meaningful dialogue and interaction with members of the host culture and/or interaction with the new environment.
- (L4) You will develop the ability to critically reflect on both your culture/environment and the host culture/environment.
- (L5) You will learn about the development of statistics in the United Kingdom and the Republic of Ireland and some of the historical individuals' ties with eugenics.

- (L6) You will learn about the technological advancements that were necessary to support modern statistics and see and hear about those modern methodologies
- (L7) You will develop the capacity to understand the contemporary world in the larger framework of tradition and history.

Prerequisite

The only pre-requisite of this class is STA 201, Statistical Methods I. I would like you to know what statistics is before we go on this adventure to learn about its history.

Required Text

The required text for this course is [The Lady Tasting Tea – How Statistics Revolutionized Science in the Twentieth Century](#) by David Salsburg. The link will bring you to Amazon where can purchase a physical or digital copy.

Course Site and Moodle

Our course will run from a combination of [Moodle](#) and the course website at <https://stats-george.quarto.pub/history-of-stats-uk-ireland/>.

Software – No need to install

There are a few activities that we may use software. If so, we will use Minitab Online available at <https://app.minitab.com/>.

Course Activities and Grades

Grade Category Descriptions

Reading Summaries + Activities (200pts):

You will be asked to summarize and answer questions about sections of the required text. I may also ask you to complete an activity or two ahead of an excursion. These will be submitted via Moodle.

Daily Experience Reflections (250pts)

Each day of the course (except days devoted wholly to travel and free days) you will need to respond to reflection questions about the day's events. These should address the sites, lectures, and activities of the day. You should make connections between the activities, the background reading(s), your own knowledge, and/or life experiences. These will not be accepted late except in extreme circumstances. These will be submitted via Moodle but the daily prompts will likely be constant. I suggest that you keep your reflections in a single Word document or a Google Doc so that your final reflection is easier.

Participation (500pts)

Travel-seminar courses require a high level of self-directed learning, interpersonal responsibility, and cultural awareness. Class members are expected to attend all class meetings and activities, arrive at meetings and destinations on time, honor the needs of the larger group, treat all class members with respect and consideration, and show respect for our cultural hosts—the communities and individuals with whom we interact. Students are expected to fully and actively participate in all scheduled and unscheduled activities (e.g., through being alert, attentive, and prepared, asking questions, making observations, facilitating interactions; illustrating leadership and teamwork skills). Finally, Cornell students are expected to respect the educational policies and codes of conduct of Cornell College.

Reflection Paper (50 pts)

You will be asked to write a 1000-word reflective paper about one or more themes from our course. These include but are not limited to cryptography, data visualization, early computers, epidemiology, experimental design, gathering information, sports statistics, or eugenics. Since this is a reflection paper you are aiming to both give a summary of the topic(s) you choose to discuss and relate it to your own life experiences and/or education. I expect this to include components of each of your past reflections and not entirely be new writing. The last day of the block will be an open writing time unless you submit ahead of time.

Additional items in the reflection should also include:

- How did your own background impact your perception of this new culture and/or environment (Learning Outcomes 1, 4)?
- Describe an uncomfortable or unexpected situation you encountered. Looking back, what did this experience teach you (Learning Outcome 2)?
- In what ways did you seek opportunities to engage in meaningful dialogue and interaction with members of the host culture and/or the new environment (Learning Outcome 3)?
- All of your prior reflections. Organized by date.

This will be submitted via Moodle.

Assignment	Points
Reading Reflections/Summaries+Activities	200
Daily Experience Reflections	250
Participation	500
Final Reflection Paper	50
Total	1000

Grade	Range	Grade	Range
A	93-100%	C	73-76%
A-	90-92%	C-	70-72%
B+	87-89%	D+	67-69%
B	83-86%	D	63-66%
B-	80-82%	D-	60-62%
C+	77-79%	F	<60%

Personal Responsibility and Policies

- We will use the “buddy” system in our course. This means you should never leave the our accommodations without at least 1 other person.
- Anytime you, or a group, plans to be somewhere without the full class, and you are not with course leader, you must message one of the course leaders in Whats App. Include any names of other students going with you and where you are going. This is not to restrict where you go, but rather allow us to help you, or someone in your group, needs it.
- Traveling to other countries and moving around every several days can be a challenge. Thus, flexibility and living with some degree of ambiguity (and potential unexpected changes) will be crucial coping skills as we move around and encounter new experiences.
- Please be patient with me and with each other.
- For most of the block, we will be in large cities. You should always be conscious of your surroundings and safety.
 - Traffic rules and local norms of behavior will be different from country to country.
 - If you feel in danger at anytime find a classmate and then contact one of the course instructors. Any day, any time.
- Drinking and drug abuse may compromise your judgment, and therefore your safety.

- I do not intend to restrict your activities outside of common time and I will not enforce a curfew.
- **Behavior that’s disruptive to the class or the experiences of other students may be addressed through campus disciplinary procedures upon our return or even during the trip. It is possible to be sent home or to have an individual curfew assigned.**

Illness Policy

If you are experiencing illness please contact your course instructor as soon as possible.

Campus Policies

DISABILITIES AND ACCOMODATIONS POLICY

Cornell College makes reasonable accommodations for persons with disabilities. Students should notify the Office of Academic Support and Advising and their course instructor of any disability related accommodations within the first three days of the term for which the accommodations are required, due to the fast pace of the block format. For more [information on the documentation required to establish the need for accommodations and the process of requesting the accommodations](#).

AI Policy

The beta release of Dall-E-Mini in July 2022 and ChatGPT in November 2022 are among many tools using artificial intelligence. There is a good possibility that using tools like these are going to become an important skill for careers in the not distant future (<https://www.theguardian.com/commentisfree/2023/jan/07/chatgpt-bot-excel-ai-chatbot-tech>).

In the meantime though, it’s going to take a while for society to figure out when using these tools is/isn’t acceptable.

Work created by AI tools may not be considered original work and, instead, considered automated plagiarism. It is derived from previously created texts from other sources that the models were trained on, yet doesn’t cite sources. AI models have built-in biases (ie, they are trained on limited underlying sources; they reproduce, rather than challenge, errors in the sources) AI tools have limitations (ie, they lack critical thinking to evaluate and reflect on criteria; they lack abductive reasoning to make judgments with incomplete information at hand; they make up or use inaccurate information and may “hallucinate” sources that do not exist)

In this course, all informal writing should be written without the use of AI. The purpose of informal writing is to help you think through your ideas, connect with your lived experiences, and to figure out your thoughts and opinions. Using AI here subverts that process.

A final note: Other courses may have different AI policies, and it is important to be aware of the policy in each class.

ACADEMIC HONESTY POLICY

Cornell College expects all members of the Cornell community to act with academic integrity. An important aspect of academic integrity is respecting the work of others. A student is expected to explicitly acknowledge ideas, claims, observations, or data of others, unless generally known. When a piece of work is submitted for credit, a student is asserting that the submission is her or his work unless there is a citation of a specific source. If there is no appropriate acknowledgment of sources, whether intended or not, this may constitute a violation of the College's requirement for honesty in academic work and may be treated as a case of academic dishonesty. The procedures regarding how the College deals with cases of academic dishonesty appear in The Catalog, under the heading "Academic Honesty."

Mandatory Reporter Reminder

It is my goal that you feel supported and able to share information related to your life experiences during classroom discussions, in your written work, and in any one-on-one meetings with me. You should also know that all Cornell College faculty and staff are mandatory reporters. This means that I will keep information you share with me private to the greatest extent possible. However, I am required to share information regarding sexual assault, abuse, criminal behavior, or about a student who may be a danger to themselves or to others. If you wish to speak to someone confidentially who is not a mandatory reporter, you can schedule an appointment with one of the counselors in the Ebersole Health and Wellbeing Center or contact the College Chaplain, Rev. Melea White, at mwhite@cornellcollege.edu.